

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1448/PTO		Complete if Known	
		Application Number	10/734,759
		Filing Date	12/11/2003
		First Named Inventor	Thomas J. Goodwin
		Art Unit	1651
		Examiner Name	Ford, Allison M.
Sheet 1 of 1		Attorney Docket Number	MSC-22859-3-CU

U. S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
✓		US- 5155034	10/13/1992	Wolf et al.
		US- 5153132	10/06/1992	Goodwin et al.
		US- 5496722	03/05/1996	Goodwin et al.
		US- 5153131	10/06/1992	Wolf et al.
		US- 5155035	10/13/1992	Schwarz et al.
		US- 5153133	10/06/1992	Schwarz et al.
		US- 5627021	05/06/1997	Goodwin et al.
		US- 5308764	05/03/1994	Goodwin et al.
		US- 5846807	12/08/1998	Goodwin
		US- 5858783	01/12/1999	Goodwin et al.
		US- 5851816	12/22/1998	Goodwin et al.
		US- 5962324	10/05/1999	O'Conner et al.
		US- 5637477	06/10/1997	Spaulding et al.
		US- 6730498	05/04/2004	Goodwin et al.
		US- 6946246	09/20/2005	Goodwin et al.
✓		US- 6117674	09/12/2000	Goodwin et al.
		US-		
		US-		
		US-		

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ "Number" "Kind Code" (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document

Examiner Signature	<i>Allison M. Ford</i>	Date Considered	12 Nov 2006
--------------------	------------------------	-----------------	-------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known

Substitute for form 1449/PTO

Application Number	10/734,759
Filing Date	12/11/2003
First Named Inventor	Thomas J. Goodwin
Art Unit	1651
Examiner Name	Ford, Allison M.

(Use as many sheets as necessary)

Sheet

1

of

2

Attorney Docket Number

MSC-22859-3-CU

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>AG</i>		Goodwin et al., Rotating-Wall vessel coculture of small intestine as a prelude to tissue modeling: aspects of simulated microgravity, February 1993, proc Soc Exp Biol Med, Vol 202, pp 181-192.	
<i>AG</i>		Condamine et al., Local action of phosphate depletion and insulin-like growth factor 1 on in vitro production of 1, 25-dihydroxyvitamin D by cultured mammalian kidney cells, October 1994, American Society for Clinical Investigation, Vol 94, pp 1673-1679.	
<i>AG</i>		Hough et al., Vitamin D Metabolism in the chronic streptozotocin-Induced diabetic rat., 1983, Endocrinology, Vol 113, pp 790-796	
		Goodwin et al., Reduced Shear Stress: A Major Component in the Ability of Mammalian Tissues to Form Three-Dimensional Assemblies in Simulated Microgravity, Journal of Cellular Biochemistry, 51:301-311, 1993	
<i>AG</i>		Jessup et al., Prospects for Use of Microgravity-Based Bioreactors to Study Three-Dimensional Host-Tumor Interactions in Human Neoplasia, Journal of Cellular Biochemistry, 52:290-300, 1993	
<i>AG</i>		Spaulding et al., Advances In Cellular Construction, Journal of Cellular Biochemistry, 51:249-251, 1993	
<i>AG</i>		Deluca, New Concepts of Vitamin D Functions, Annals New York Academy of Sciences, 669:59-69, 1992	
<i>AG</i>		Hammond et al., Analysis and Isolation of renal tubular cells by flow cytometry, Kidney International, 42:997-1005, 1992	
<i>AG</i>		Hammond et al., Forward Scatter Pulse Width Signals Resolve Multiple Populations of Endosomes, Cytometry, 14:411-420, 1993	
<i>AG</i>		Wolf et al., Analysis of Gravity-Induced Particle Motion and Fluid Perfusion Flow in the NASA-Designed Rotating Zero-Head-Space Tissue Culture Vessel, NASA Technical Paper 3143, 1991.	

Examiner Signature	<i>Allison M. Sl</i>	Date Considered	25 Oct. 2006
--------------------	----------------------	-----------------	--------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.
 This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:
 Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

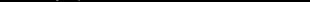
If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known

Substitute for form 1449 PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/734,759
		Filing Date	12/11/2003
		First Named Inventor	Thomas J. Goodwin
		Art Unit	1651
		Examiner Name	Ford, Allison M.
Sheet	2	of	2
		Attorney Docket Number	MSC-22859-3-CU

NON-PATENT LITERATURE DOCUMENTS

Examiner Signature  Date Considered 12 Nov 2006

***EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.